

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strike through~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please CANCEL claims 1, 2, 12 and 13 without prejudice or disclaimer and AMEND claims 4, 6-11, 15, 17-23 and 29-34 in accordance with the following:

1. (cancelled)
2. (cancelled)
3. (previously presented) A weight detecting device for a microwave oven, comprising:
 - a weight detecting unit supported at an end thereof, and detecting a weight according to a force applied to a free end thereof; and
 - a support unit which supports the weight detecting unit at a position spaced apart from a top plate of an interior casing of the microwave oven by a predetermined height, wherein the support unit is mounted to the top plate of the interior casing.
4. (currently amended) The weight detecting device according to claim ~~43~~, further comprising a food seating unit, wherein the weight detecting unit detects the weight according to an external force generated by food placed on the food seating unit, the food seating unit being provided on a top plate of an exterior casing of the microwave oven.
5. (previously presented) A weight detecting device for a microwave oven, comprising:
 - a weight detecting unit supported at an end thereof and detecting a weight according to an external force applied to a free end thereof;
 - a support unit to support the weight detecting unit; and
 - a food seating unit comprising
 - a tray bracket integrated with a top plate of an exterior casing of the microwave oven,
 - a rubber packing mounted to the tray bracket, and

a locking ring to lock the rubber packing to the tray bracket,
wherein the weight detecting unit detects the weight according to the external force generated by food placed on the food seating unit, the food seating unit being provided on the top plate of the exterior casing of the microwave oven.

6. (currently amended) The weight detecting device according to claim ~~4~~3, wherein the weight detecting unit further comprises:
the weight sensor having a predetermined length; and
a force transmitting unit mounted to the free end of the weight ~~sensor~~detecting ~~unit~~ so as to transmit the external force to the free end of the weight ~~sensor~~detecting ~~unit~~.

7. (currently amended) The weight detecting device according to claim 6, wherein the weight ~~sensor~~detecting ~~unit~~ is provided with at least one heat dissipating hole.

8. (currently amended) The weight detecting device according to claim 6, wherein the force transmitting unit comprises:
a support plate having a predetermined area; and
a rod, provided adjacent to the support plate, to concentrate the force applied to the support plate on the free end of the weight ~~sensor~~detecting ~~unit~~.

9. (currently amended) A weight detecting device with a support unit for a microwave oven, comprising:
a weight ~~sensor~~detecting ~~unit~~ formed of a beam fixed at one end thereof to the support unit, supported on an interior casing of the microwave oven at the fixed end of the weight detecting unit by the support unit, to detect a weight placed on a free end of the beam based on a deflection of the beam.

10. (currently amended) A weight detecting device for a microwave oven, comprising:
a weight ~~sensor~~detecting ~~unit~~ formed of a cantilever beam, supported on an interior casing of the microwave oven at a fixed end of the weight detecting unit, for which a displacement of a free end thereof is substantially resistant to temperature variation so as to detect a weight placed on the free end of the cantilever beam based on the displacement of the free end thereof.

11. (currently amended) A weight detecting device for a microwave oven, comprising:

a weight ~~sensor~~detecting unit formed of a cantilever beam, supported on an interior casing of the microwave oven at a fixed end of the weight detecting unit, for which a displacement of a free end thereof is substantially resistant to temperature variation, and detecting a weight according to a force applied to the free end of the cantilever beam causing the displacement of the free end of the cantilever beam.

12. (cancelled)

13. (cancelled)

14. (previously presented) A weight detecting device with a support unit for a microwave oven, comprising:

a weight detecting unit supported at an end thereof by the support unit, and detecting a weight according to a force applied to a free end thereof, wherein the support unit supports the weight detecting unit at a position spaced apart from a top plate of an interior casing of the microwave oven by a predetermined height, and the support unit is mounted to the top plate of the interior casing.

15. (currently amended) The weight detecting device according to claim ~~12~~14, further comprising a food seating unit to transmit to the weight detecting unit an external force generated by the food placed on the food seating unit, the food seating unit being provided on a top of the microwave oven.

16. (previously presented) A weight detecting device with a support unit for a microwave oven, comprising:

a weight detecting unit supported at an end thereof by the support unit, and detecting a weight according to a force applied to a free end thereof; and

a food seating unit comprising

a tray bracket integrated with the top of the microwave oven,

a rubber packing mounted to the tray bracket, and

a locking ring locking the rubber packing to the tray bracket,

wherein the food seating unit transmits to the weight detecting unit an external force generated by the food placed on the food seating unit, and the food seating unit is provided on a top of the microwave.

17. (currently amended) The weight detecting device according to claim ~~12~~14, wherein the weight detecting unit comprises:

a weight sensor having a predetermined length, the weight detecting unit supported at a fixed end thereof by the support unit, and the weight sensor detecting the weight according to an external force applied to a free end ~~thereof~~ of the weight detecting unit; and

a transmitting unit mounted to the free end of the weight ~~sensor~~ detecting unit so as to transmit the external force to the free end of the weight ~~sensor~~ detecting unit.

18. (currently amended) The weight detecting device according to claim 17, wherein the transmitting unit comprises:

a shaft positioned perpendicular to the free end of the weight ~~sensor~~ detecting unit to transmit the external force applied to a food seating unit to the free end of the weight ~~sensor~~ detecting unit.

19. (currently amended) A weight detecting device with a support unit for a microwave oven, comprising:

a weight detecting unit supported at an end thereof by the support unit, and detecting a weight according to an external force applied to a free end thereof, the weight detecting unit comprising

a weight sensor of a predetermined length, the weight detecting unit supported at a fixed end thereof by the support unit, and the weight sensor detecting the weight according to the external force applied at a free end ~~thereof~~ of the weight detecting unit ~~and comprising~~,

a beam supported by the support unit, and

one or more heat dissipating holes formed in the beam at a predetermined portion of the beam so as to allow the beam to bend in response to the external force applied to the free end of the weight ~~sensor~~ detecting unit and to dissipate heat generated by the microwave oven; and

a transmitting unit mounted to the free end of the ~~weight sensor~~ detecting unit so as to transmit the external force to the free end of the weight ~~sensor~~ detecting unit and comprising a shaft positioned perpendicular to the free end of the weight ~~sensor~~ detecting unit to transmit the external force applied to a food seating unit to the free end of the weight ~~sensor~~ detecting unit, wherein the beam of the weight ~~sensor~~ detecting unit communicates with the shaft of the transmitting

unit.

20. (currently amended) The weight detecting device according to claim 17, wherein the transmitting unit comprises:

a support plate; and

a rod, positioned between the support plate and the weight ~~sensor~~detecting unit, to concentrate the external force applied to the support plate onto the free end of the weight ~~sensor~~detecting unit.

21. (currently amended) A weight detecting device with a support unit for a microwave oven, comprising:

a weight detecting unit supported at an end thereof by the support unit, and detecting a weight according to an external force applied to a free end thereof, the weight detecting unit comprising

a weight sensor of a predetermined length, the weight detecting unit supported at a fixed end thereof by the support unit, and the weight sensor detecting the weight according to the external force applied at a free end ~~thereof of~~ the weight detecting unit and comprising upper and lower weight sensors,

a beam supported by the support unit wherein the upper and lower weight sensors are provided on each of upper and lower surfaces of a central portion of the beam of the weight detecting unit, respectively, such that a variation, according to a displacement of the beam of the weight detecting unit, in the internal resistance of the upper and lower weight sensors is detected,

one or more heat dissipating holes formed in the beam at a predetermined portion of the beam so as to allow the beam to bend in response to the external force applied to the free end of the weight ~~sensor~~detecting unit and to dissipate heat generated by the microwave oven, ~~and~~
~~upper and lower sensing elements provided on each of upper and lower surfaces of a central portion of the beam of the weight sensor, respectively, such that a variation, according to a displacement of the beam of the weight sensor, in the internal resistance of the upper and lower sensing elements is detected; and~~

a transmitting unit mounted to the free end of the weight ~~sensor~~detecting unit so as to transmit the external force to the free end of the weight ~~sensor~~detecting unit and comprising a shaft positioned perpendicular to the free end of the weight ~~sensor~~detecting unit to transmit the external force applied to a food seating unit to the free end of the weight sensor, wherein the beam of the weight

~~sensor detecting unit~~ communicates with the shaft of the transmitting unit.

22. (currently amended) A weight detecting device, with a support unit for a microwave oven, comprising:

a weight detecting unit supported at an end thereof by the support unit, and detecting a weight according to an external force applied to a free end thereof, the weight detecting unit comprising

a weight sensor of a predetermined length, the weight detecting unit supported at a fixed end thereof by the support unit, and the weight sensor detecting the weight according to the external force applied at a free end ~~thereof of the weight detecting unit~~ and comprising upper and lower weight sensors

a beam supported by the support unit, wherein the upper and lower sensors are provided on each of upper and lower surfaces of a central portion of the beam of the weight detecting unit, respectively, such that a variation, according to a displacement of the beam of the weight detecting unit, in the internal resistance of the upper and lower weight sensors is detected,

one or more heat dissipating holes formed in the beam at a predetermined portion of the beam so as to allow the beam to bend in response to the external force applied to the free end of the weight ~~sensor detecting unit~~ and to dissipate heat generated by the microwave oven, ~~and~~

~~upper and lower sensing elements provided on each of upper and lower surfaces of a central portion of the beam of the weight sensor, respectively, such that a variation, according to a displacement of the beam of the weight sensor, in the internal resistance of the upper and lower sensing elements is detected; and~~

a transmitting unit mounted to the free end of the weight ~~sensor detecting unit~~ so as to transmit the external force to the free end of the weight ~~sensor detecting unit~~ and comprising a shaft positioned perpendicular to the free end of the weight ~~sensor detecting unit~~ to transmit the external force applied to a food seating unit to the free end of the weight ~~sensor detecting unit~~, wherein the beam of the weight ~~sensor detecting unit~~ communicates with the shaft of the transmitting unit,

wherein when the weight ~~sensor detecting unit~~ is bent in response to a load applied to the free end of the weight ~~sensor detecting unit~~, the upper surface of the beam of the weight ~~sensor detecting unit~~ having the upper ~~sensing element~~ weight sensor expands while the lower surface of the beam of the weight ~~sensor detecting unit~~ having the lower ~~sensing element~~ weight sensor contracts to change an internal resistance of the upper and lower ~~sensing elements~~ weight sensors.

23. (currently amended) A weight detecting device with a support unit for a microwave oven, comprising:

a weight detecting unit supported at an end thereof by the support unit, and detecting a weight according to an external force applied to a free end thereof, the weight detecting unit comprising

a weight sensor of a predetermined length, the weight detecting unit supported at a fixed end thereof by the support unit, and the weight sensor detecting the weight according to the external force applied at a free end ~~thereof~~ the weight detecting unit and comprising,

a beam supported by the support unit, and

one or more heat dissipating holes formed in the beam at a predetermined portion of the beam so as to allow the beam to bend in response to the external force applied to the free end of the weight ~~sensor-detecting unit~~ and to dissipate heat generated by the microwave oven; and

a transmitting unit mounted to the free end of the weight ~~sensor-detecting unit~~ so as to transmit the external force to the free end of the weight ~~sensor-detecting unit~~ and comprising a shaft positioned perpendicular to the free end of the weight ~~sensor-detecting unit~~ unit to transmit the external force applied to a food seating unit to the free end of the weight ~~sensor-detecting unit~~,

wherein the beam of the weight ~~sensor-detecting unit~~ communicates with the shaft of the transmitting unit and the weight ~~sensor-detecting unit~~ is made of an elastic material to bend by the external force applied to the shaft.

24. (original) A microwave oven comprising:

an interior casing disposed therein with a top plate thereof;

a support unit; and

a weight detecting unit supported on the interior casing at a fixed end of the weight detecting unit by the support unit, and detecting a weight according to a force applied to a free end of the weight detecting unit.

25. (original) The microwave oven according to claim 24, wherein the support unit supports the weight detecting unit at a position spaced apart from the top plate of the interior casing by a predetermined height.

26. (original) The microwave oven according to claim 25, wherein the support

unit is mounted to the top plate of the interior casing.

27. (original) The microwave oven according to claim 24, further comprising:
an exterior casing with a top plate thereof; and
a weight detecting device comprising a food seating unit to transmit to the weight detecting unit an external force generated by food placed on the food seating unit, the food seating unit being provided on the top plate of the exterior casing.

28. (original) The microwave oven according to claim 27, wherein the food seating unit comprises:

- a tray bracket integrated with the top plate of the exterior casing;
- a rubber packing mounted to the tray bracket; and
- a locking ring to lock the rubber packing to the tray bracket.

29. (currently amended) The microwave oven according to claim 24, wherein the weight detecting unit comprises;

a weight sensor having a length, the weight detecting unit supported at a fixed end thereof by the support unit, and the weight sensor detecting the weight according to an external force applied to a free end ~~thereof~~the weight detecting unit; and

a transmitting unit mounted to the free end of the weight ~~sensor~~detecting unit so as to transmit the external force to the free end of the weight ~~sensor~~detecting unit.

30. (currently amended) The weight detecting device according to claim 29, wherein the weight ~~sensor~~detecting unit further comprises:

a beam supported by the support unit and communicating with the shaft of the transmitting unit; and

one or more heat dissipating holes formed in the beam at a predetermined portion of the beam so as to allow the beam to bend in response to the external force applied to the free end of the weight ~~sensor~~detecting unit and to dissipate heat generated by the microwave oven.

31. (currently amended) The microwave oven according to claim 29, wherein the transmitting unit comprises:

- a support plate; and
- a rod, positioned between the support plate and the weight ~~sensor~~detecting unit, to

concentrate the external force applied to the support plate onto the free end of the weight ~~sensor~~detecting unit.

32. (currently amended) The microwave oven according to claim 29, wherein the weight sensor comprises:

upper and lower ~~sensing element~~weight sensors provided on each of upper and lower surfaces of a central portion of the beam of the weight ~~sensor~~detecting unit, respectively, such that a variation, according to a displacement of the beam of the weight ~~sensor~~detecting unit, in the internal resistance of the upper and lower ~~sensing element~~weight sensors is detected.

33. (currently amended) The microwave oven according to claim 30, wherein, when the weight ~~sensor~~detecting unit is bent in response to the load applied to the free end of the weight ~~sensor~~detecting unit, the upper surface of the beam of the weight sensor having the upper ~~sensing element~~weight sensor expands while the lower surface of the beam of the weight ~~sensor~~detecting unit having the lower ~~sensing element~~weight sensor contracts to change an internal resistance of the upper and lower ~~sensing element~~weight sensors.

34. (currently amended) The microwave oven according to claim 30, wherein the weight ~~sensor~~detecting unit is made of an elastic material to bend by the external force applied to the shaft.

35. (cancelled)

36. (cancelled)

37. (original) A microwave oven, comprising:
an interior casing disposed therein with a top plate thereof;
a support unit; and
a weight detecting unit with a beam thereof, supported on the interior casing at a fixed end of the weight detecting unit by the support unit, to detect a weight placed on a free end of the beam based on a deflection of the beam.

38. (original) A microwave oven, comprising:

an interior casing disposed therein with a top plate thereof;

a support unit; and

a weight detecting unit with a cantilever beam, supported on the interior casing at a fixed end of the weight detecting unit by the support unit, for which a displacement of a free end thereof is substantially resistant to temperature variation so as to detect a weight placed on the free end of the cantilever beam based on the displacement of the free end thereof.

39. (original) A microwave oven, comprising:

an interior casing disposed therein with a top plate thereof;

a support unit; and

a weight detecting unit with a cantilever beam, supported on the interior casing at a fixed end of the weight detecting unit by the support unit, for which a displacement of a free end thereof is substantially resistant to temperature variation , and detecting a weight according to a force applied to the free end of the cantilever beam causing the displacement of the free end of the cantilever beam.

40. (previously presented) A microwave oven, comprising:

an interior casing disposed therein with a top plate thereof;

a support unit mounted on the top plate; and

a weight detecting unit only a part of which is supported by the support unit to allow displacement thereof and to reduce a space to install the weight detecting unit.